

## ABSTRACT OF THE DISCLOSURE

Disclosed are an air conditioner in which one or more compressors are operated so that the refrigerant compression capacity of the operating compressor(s) is variably changed in accordance with a cooling or heating load for cooling or heating air in a room, and a method for controlling an electronic expansion valve of the air conditioner. The air conditioner comprises a plurality of compressors for compressing a refrigerant; a condenser for condensing the refrigerant; an electronic expansion valve for expanding the refrigerant; an evaporator for evaporating the refrigerant; a direction change valve for changing the flow direction of the refrigerant; a refrigerant pipe for connecting the compressors, the condenser, the electronic expansion valve, the evaporator and the direction change valve; and a microcomputer for controlling the operation of the air conditioner, wherein an opening degree of the electronic expansion valve is controlled so that a current degree of superheat coincides with a target degree of superheat set in consideration of the refrigerant compression capacity of operating compressor(s) and an outdoor temperature. The air conditioner prevents the refrigerant in a liquid state from being introduced into the compressor(s) and the compressor(s) from overheating, and rapidly eliminates the cooling or heating load, thus providing comfortableness to